PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference PU030301	FOR FURTHER ACT	R FURTHER ACTION See Form PCT/IPEA/416					
International application No. International filing date PCT/US2004/006205 27.02.2004		ay/month/year)	Priority date (day/month/year) 27.02.2004				
International Patent Classification (IPC) or INV. H04N7/34 H04N7/68	national classification and IPC						
Applicant	<u>:</u>						
THOMSON LICENSING S.A. et al.							
This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.							
2. This REPORT consists of a total	of 5 sheets, including this	s cover sheet.					
3. This report is also accompanied	ANNEYES comprising						
a 🛛 sent to the applicant and	to the International Bureau	u) a total of 5 sheets, a	as follows:				
sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).							
sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.							
b. (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)), containing a sequence listing and/or tables related thereto, in celectronic form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).							
Relating to Sequence Lis	ting (see Section 802 of the	le Administrative mond.	odono).				
·		· ·					
4. This report contains indications	4. This report contains indications relating to the following items:						
⊠ Box No. I Basis of the re	port						
☐ Box No. II Priority	☐ Box No. II Priority						
☐ Box No. III Non-establish	ment of opinion with regard	d to novelty, inventive s	step and industrial applicability				
☐ Box No. IV Lack of unity of							
Box No. V Reasoned sta applicability; o	the second secon						
☐ Box No. VI Certain docum							
☐ Box No. VII Certain defect	☐ Box No. VII Certain defects in the international application						
☐ Box No. VIII Certain obser							
Date of submission of the demand		Date of completion of this	s report				
08.10.2004		16.05.2006					
Name and mailing address of the international		Authorized officer					
preliminary examining authority:			Seath M.				
European Patent Office D-80298 Munich		Kuhn, P					
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INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No. PCT/US2004/006205

	Box No. I	Basis of the repor	rt					
1.	With regard	ith regard to the language , this report is based on the international application in the language in which it wated, unless otherwise indicated under this item.						
	☐ This re which	port is based on tranist the language of a	nslations from the origina translation furnished for	al language into the follow the purposes of:	ving language ,			
	dua 🗆	olication of the interna	der Rules 12.3 and 23.1 ational application (under examination (under Ru	er Rule 12.4)				
2.	have been	With regard to the elements* of the international application, this report is based on <i>(replacement sheets which ave been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report):</i>						
	Description	n Pages						
	1-12	, rages	as originally filed					
	Claims, Nu	mbers						
	1-32		received on 08.10.2004	with letter of 07.10.2004		·		
	Drawings, S	Sheets			•			
	1/5-5/5		as originally filed					
	□ a sequ	uence listing and/or a	ny related table(s) - see	Supplemental Box Relat	ing to Sequence Listi	ng		
3.	⊠ The ar	mendments have res	sulted in the cancellation	of:				
		description, pages claims, Nos. 25, 26				*		
	☐ the	drawings, sheets/fig						
	□ the	e sequence listing (sp y table(s) related to s	sequence listing (specify)):				
4.	had not be	eport has been estab en made, since they ntal Box (Rule 70.2(c	have been considered t	e amendments annexed o go beyond the disclosu	to this report and liste ire as filed, as indicate	ed below ed in the		
		e description, pages e claims, Nos.						
	☐ the	drawings, sheets/fig			÷			
	□ the	e sequence listing <i>(sp</i> y table(s) related to s	sequence listing (specify)) :				
	* If it	em 4 applies, s	ome or all of thes	se sheets may be ma	rked "superseded	đ."		

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)

Yes: Claims

lo: Claims

1-32

Inventive step (IS)

Yes: Claims

No: Claims

1-32

Industrial applicability (IA)

Yes: Claims

1-32

No: Claims

2. Citations and explanations (Rule 70.7):

see separate sheet

Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

see separate sheet

Re Item V

1 The following document is referred to in this communication:

D1: US 2002/181594 A1 (KIM CHANG-SU ET AL) 5 December 2002 (2002-12-05)

- 2 INDEPENDENT CLAIM 1 NOVELTY
- 2.1 The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claim 1 is not new in the sense of Article 33(2) PCT. Document D1 discloses:
 - A method of concealing, at a JVT-compliant (D1: p1/sections 7 and 11) decoder, spatial errors in an image comprised of a stream of coded macroblocks compressed in accordance with the JVT coding standard, comprising the steps of:
 - a) examining each JVT-coded macroblock for pixel data errors, and if any such errors exist (D1: p7-10/sect 88-116, Fig. 6/612, 608), then
 - b) weighting at least one JVT-coded macroblock at the JVT-compliant decoder, in accordance with at least one reference picture to yield a weighted prediction for concealing a macroblock found to have pixel errors (D1: p7-10/sect 88-116, Fig. 6).

The person skilled in the art is aware that the ITU-T standard H.264, which is referred to as "JVT" in claim 1, is equivalent to the MPEG-4 part 10 AVC standard. MPEG-4 is explicitly mentioned in D1: p1/sections 7 and 11. Moreover, amending "decoder" in claim 1 to "JVT-compliant decoder" still does not overcome the lack of inventive step in claim 1. A person skilled in the art could apply error concealing at the decoder, as written in claim1, to macroblocks coded and decoded by any standard.

In response to the communication by the applicant, claim 1 does not disclose <u>how</u> a JVT-compliant decoder uses JVT weighting parameters in order to achieve error concealment.

INDEPENDENT CLAIMS 22, 23, 32 - NOVELTY

- 3 Since the subject-matter of each of independent claims 22, 23, 32 corresponds to the subject matter of claim 1, the same reasoning as given for claim 1 will apply mutatis mutandis. Therefore claims 22, 23, 32 also do not meet the requirements of the PCT in respect of novelty and/or inventive step (Article 33(2) and (3) PCT).
- 4 DEPENDENT CLAIMS 2-21, 24-31

Dependent claims 2-21, 24-31 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of novelty and/or inventive step (Article 33(2) and (3) PCT).

Re Item VIII

- Although claims 1, 22, 23, 32 have been drafted as separate independent claims, they appear to relate effectively to the same subject-matter and to differ from each other only with regard to the definition of the subject-matter for which protection is sought or in respect of the terminology used for the features of that subject-matter. The aforementioned claims therefore lack conciseness and as such do not meet the requirements of Article 6 PCT.
- The terms "implicit" and "explicit" used in claims 2, 3, ff. are vague and unclear and leave the reader in doubt as to the meaning of the technical features to which they refer, thereby rendering the definition of the subject-matter of said claims unclear, Article 6 PCT.